

MARINER was a DG-ECHO funded project that aimed to improve regional cooperation in planning, preparedness and response to HNS spills by improving training and exercise, increasing awareness and information exchange, and by capitalization and translation of HNS relevant R & D projects' outcomes into operational products.

MARINER run from January 2016 to January 2018. Here you can find a list of the project publicly available outputs. To learn more about the project please visit www.mariner-project.eu

Click on the image to visualise the MARINER Mindmap with an overview of project working streams and results



KNOWLEDGE COMPILATION AND FACILITATION



MARINER Knowledge Tool: Database accessible through a user-friendly online browser that allows carrying out advanced and basic searches on resources relevant for different areas of HNS preparedness and response.

e-Booklets Compiling key resources from the knowledge tool, under specific knowledge areas.



Contingency plans & response



Risk Analysis



Training and exercising



Environmental impact



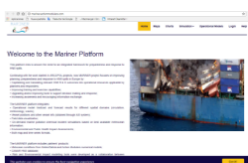
HNS characterisation



Modelling tools

MODELLING AND ENVIRONMENTAL IMPACT

MARINER modelling Platform



Software (3D HNS spill model) and interface (Common Operating Picture - COP) for predicting the fate, behaviour and environmental / public health risks from a chemical spill in the Atlantic area.

OGC GML schema for HNS Spills



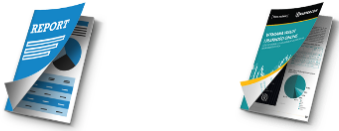
To assure the interoperability among different agencies when they share information about HNS spill events, a Geography Markup Language GML schema was proposed.

Standard symbols and styles for mapping



This report presents the state-of-the-art in the use of different symbols for hazard and warning situations.

Modelling of HNS hazards to the environment



Toxicological parameters selected

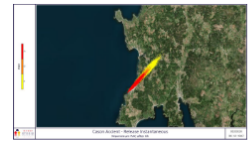
Modelling HNS hazards for predicting effects on the marine amphipods population

Guidelines and protocols for environmental impact assessment



Compilation of chemical, biological and ecological information to produce guidelines for HNS environmental impact assessment.

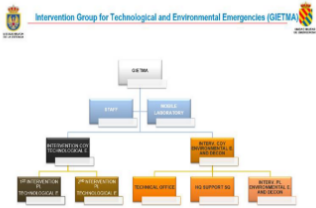
Comparing MARINER system with other systems



Analysis of the performance of the 3D-HNS MOHID model with other models currently in use.

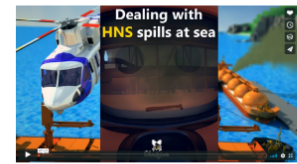
RESPONSE PROTOCOLS

Protocols for responding to HNS spills at sea



This guide for responders includes adapted protocols to deal with HNS spills in the marine environment: pre-planning considerations, communication and operational procedures, and technical considerations.

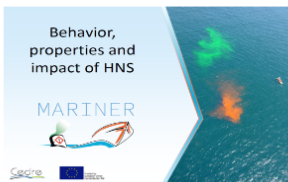
Video: dealing with HNS spills at sea



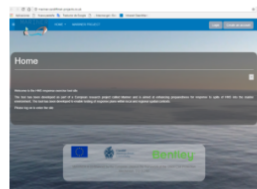
EXTENDED

TRAINING

Training package on HNS spill management



Exercise Web Tool for bespoke desk-top maritime HNS exercises



Training package on HNS modelling and environmental impact



E-learning: International Health Regulations and HNS maritime incidents



DISSEMINATION

MARINER Layman's report



1st MARINER Project Workshop



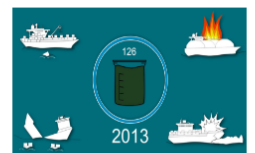
2nd MARINER Project Workshop



Final Project Conference



MARINER Introductory video



Awareness raising video



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